



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,333	09/13/2005	Pinchas Shalev	12704736	6693
44909 PRTSI P.O. Box 16446 Arlington, VA 22215	7590 08/18/2008		EXAMINER RALIS, STEPHEN J	
			ART UNIT 3742	PAPER NUMBER
			MAIL DATE 08/18/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/549,333

**Applicant(s)**

SHALEV ET AL.

**Examiner**

STEPHEN J. RALIS

**Art Unit**

3742

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 April 2008 and 15 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 7-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 April 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/1/2008.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Applicant is respectfully requested to provide a location within the disclosure to support any further amendments to the claims due to when filing an amendment an applicant should show support in the original disclosure for new or amended claims. See MPEP § 714.02 and § 2163.06 ("Applicant should specifically point out the support for any amendments made to the disclosure.").

***Response to Amendment/Arguments***

3. Examiner accepts amendments to Abstract, Drawings, and Specification and respectfully withdraws the objections, accordingly.
4. Applicant's arguments filed 15 May 2008 have been fully considered but they are not persuasive as set forth below.

***Claim Objections***

5. Claims 1, 3-5, 7-12 and 15 are objected to because of the following informalities: The claims recite "heat-generating elongate element" The claims should read –heat-generating elongated element–. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In the instant case, applicant has disclosed "adjuster mechanisms" in paragraphs 120-121 of the printed publication of the instant application (U.S. Publication No. 2007/0145031). Applicant further discloses a motion detector wheel (110) that can be used to vary certain aspects of the tool (temperature, vibrational speed, lights; paragraphs 123-124). However, there is no disclosure to the "adjuster mechanism" being responsive to motion detected by the motion detector wheel. Therefore, the recitation to "wherein said one or more adjuster mechanisms adjusts the position of the heat generating elongate element responsive to detection by said motion detector" is deemed new matter.
8. Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In the instant case, applicant has disclosed "adjuster mechanisms" in paragraphs 120-121 of the printed publication of the instant application (U.S. Publication No. 2007/0145031). Applicant further discloses a motion detector wheel (110) that can be used to vary certain aspects of the tool (temperature, vibrational speed, lights;

paragraphs 123-124). ). However, there is no disclosure to the "adjuster mechanism" being responsive to motion detected by the motion detector wheel. Therefore, the examiner asserts that the recitation to "wherein said one or more adjuster mechanisms adjusts the position of the heat generating elongate element responsive to detection by said motion detector" does not meet the enablement requirement..

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "a heat generating elongate element situated in the opening, positioned with respect to the opening such that, in operation, the heat generating elongate element can touch the skin, and capable of producing heat sufficient to cut hair, when electrified". It is unclear and uncertain to the examiner to how a heating element that can singe/cut/shave hair does not burn the user when "the heat generating elongate element can touch the skin". Further clarification to structural limitations is required to provide the examiner a definite recitation to the functioning structure to avoid a potential .

Claim 4 recites the limitation "one or more position adjuster mechanisms juxtaposed between the frame and the base". The term "juxtaposed" is defined as "placed side by side". If the recitation to "one or more position adjuster mechanisms"

includes "one", the examiner queries applicant to how the "one position adjuster mechanism" can be "juxtaposed" (placed side by side) when it is a single element.

Further clarification is required.

Claim 1 recites the limitation "the head" in lines 4, 9.

Claim 2 recites two or more rows of skin depressing elements.

There is insufficient antecedent basis for this limitation in the claim.

In general, the claims are replete with such 35 U.S.C. 112, second paragraph issues. The above notes are exemplary with respect to all of the 35 U.S.C. 112, second paragraph rejections present in the instant case, all claims must be carefully reviewed and appropriate corrections should be made in response to this rejection.

### ***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 3, 8, 10 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Peterson (U.S. Patent No. 2,231,219).

Peterson discloses a hair cutting head (see Figures 1-3), for use in a hair shaving/cutting apparatus and having a portion adapted for contacting an area of skin having hair, the head comprising: a) at least two rows of elongate skin depressing elements (termination ends of tubular guard member 1 creating slot 5), a space (slot 5)

between the ends of the elements (either ending side of tubular guard member 1) defining an opening in the head, b) a heat generating elongate element (heated wire 3) situated in the opening (slot 5, see Figure 2), positioned with respect to the opening (slot 5) such that, in operation, the heat generating elongate element can touch the skin, and capable of producing heat sufficient to cut hair, when electrified (column 2, lines 26-30); and c) a base (rear end on tubular guard member 1 connected to handle 2) on which the elements of the head are mounted, wherein each of the skin depressing elements have a long axis pointed generally toward the center of the opening (see Figures 1-3).

With respect to the limitation of a heat generating elongate element situated in the opening, positioned with respect to the opening such that, in operation, the heat generating elongate element can touch the skin, and capable of producing heat sufficient to cut hair, when electrified, the recitation to "such that, in operation, the heat generating elongate element can touch the skin" is deemed intended use. It has been held that a recitation with respect to the manner in which the claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations (see MPEP § 2114). Peterson explicitly discloses the heat generating elongate element (heated wire 3) situated in the opening (slot 5) to provide a close shave. Therefore since Peterson discloses the structural limitations of the recited claims, Peterson fully meets "a heat generating elongate element situated in the opening, positioned with respect to the opening such that, in operation, the heat generating elongate element can touch the skin, and capable

of producing heat sufficient to cut hair, when electrified" given its broadest reasonable interpretation.

With respect to the limitations of claims 3 and 8, Peterson discloses the two or more skin depressing elements (either ending side of tubular guard member 1) being separated by a gap (slot 5) in which the heat generating elongate element (heated wire 3) is located (see Figure 2).

With respect to the limitations of claims 10 and 14, Peterson discloses a hand held hair cutting apparatus (Figure 1, 3) further including a power source (not shown; column 2, lines 26-30) that is adapted to be pressed against the skin of a user and cut hair on the skin (column 2, lines 22-52).

Peterson further discloses the heating wire (3) being supported by any suitable means (column 2, lines 26-30).

13. Claims 1-5, 7, 8, 10 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (U.S. Patent No. 3,093,724).

Johnson discloses a hair cutting head (Title; see Figures 1-4), for use in a hair cutting/shaving apparatus and having a portion adapted for contacting an area of skin having hair, the head comprising: a) at least two rows of elongate skin depressing elements (tips of two sets of tapered teeth 1, 2), a space (longitudinal slot 3) between the ends of the elements (two sets of tapered teeth 1, 2) defining an opening in the head; b) a heated elongate element (heated longitudinal wire blade 4) situated in the opening (longitudinal slot 3, see Figure 4), positioned with respect to the opening such



that, in operation, the heat generating elongate element can touch the skin, and capable of producing heat sufficient to cut hair, when electrified (column 1-2); and c) a base (rear end of connection portion in combination with the non-tapered portions the two sets of tapered teeth 1, 2) on which the elements of the head are mounted, wherein each of the skin depressing elements have a long axis pointed generally toward the center of the opening (see Figures 1-4).

With respect to the limitation of a heat generating elongate element situated in the opening, positioned with respect to the opening such that, in operation, the heat generating elongate element can touch the skin, and capable of producing heat sufficient to cut hair, when electrified, the recitation to "such that, in operation, the heat generating elongate element can touch the skin" is deemed intended use. It has been held that a recitation with respect to the manner in which the claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations (see MPEP § 2114). Johnson explicitly discloses the heat generating elongate element (heated longitudinal wire blade 4) situated in the opening (longitudinal slot 3) to cut hair at a desired length. Therefore since Johnson discloses the structural limitations of the recited claims, Peterson fully meets "a heat generating elongate element situated in the opening, positioned with respect to the opening such that, in operation, the heat generating elongate element can touch the skin, and capable of producing heat sufficient to cut hair, when electrified" given its broadest reasonable interpretation.

With respect to the limitations of claim 2, Johnson discloses the long axes of the two sets of tapered teeth being less than about 20 degrees with the plane defined by the opening (see Figures 3, 4).

With respect to the limitations of claims 3 and 8, Johnson discloses the two or more rows of skin depressing elements (two sets of tapered teeth 1, 2) being separated by a gap (longitudinal slot 3) in which the heat generating elongate element (heated longitudinal wire blade 4) is located (see Figures 1-4).

With respect to the limitations of claims 4, 5 and 7, Johnson discloses which the heat generating elongate element (heated longitudinal wire blade 4) being suspended on a frame (threaded portions 4') moveable mounted on the base (rear end of connection portion in combination with the non-tapered portions the two sets of tapered teeth 1, 2) and two adjuster mechanism (nuts 8') placed side by side of the heat generating elongate element (heated longitudinal wire blade 4) between the frame (threaded portions 4') and the base (rear end of connection portion in combination with the non-tapered portions the two sets of tapered teeth 1, 2) (see Figure 2).

With respect to the limitations of claims 10 and 14, Peterson discloses a hand held hair cutting apparatus (Figure 1, 3) further including a power source (not shown; column 2, lines 7-10) that is adapted to be pressed against the skin of a user and cut hair on the skin (Title).

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

16. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

17. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson (U.S. Patent No. 2,231,219).

Peterson discloses all of the limitations of the claimed invention, as previously set forth, except for the long axes making an angle of less than about 20 degrees with a plane defined by the opening.

Peterson discloses the tubular guard member being placed against the face with the slot (5) substantially at right angles to the skin (column 2, lines 35-37). To provide an making an angle of less than about 20 degrees with a plane defined by the opening would have been a mere engineering expediency as Peterson clearly teaches providing a slot against the face with a substantial right angle. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to make an angle of less than about 20 degrees with a plane defined by the opening, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Claims 4, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson (U.S. Patent No. 2,231,219) in view of Johnson (U.S. Patent No. 3,093,724).

Peterson discloses all of the limitations of the claimed invention, as previously set forth, except for a heat generating elongate element being suspended on a frame moveable mounted on a base and one or more adjuster mechanism juxtaposed between the frame and the base, wherein the one or more adjuster mechanisms adjusts the angle/overall position of the heat generating elongate element with respect to a plane of the opening.

However, a heat generating elongate element being suspended on a frame moveable mounted on a base and one or more adjuster mechanism juxtaposed between the frame and the base, wherein the one or more adjuster mechanisms adjusts the angle/overall position of the heat generating elongate element with respect to a plane of the opening. Johnson, for example, teaches the heat generating elongate element (heated longitudinal wire blade 4) being suspended on a frame (threaded portions 4') moveable mounted on the base (rear end of connection portion in combination with the non-tapered portions the two sets of tapered teeth 1, 2) and two adjuster mechanism (nuts 8') placed side by side of the heat generating elongate element (heated longitudinal wire blade 4) between the frame (threaded portions 4') and the base (rear end of connection portion in combination with the non-tapered portions the two sets of tapered teeth 1, 2) (see Figure 2). The nuts (8') are used to adjust the longitudinal wire blade (4) up and down within the longitudinal slot (3) (column 2, lines 11-16), thereby adjusting the angle of the longitudinal wire blade (4) within the longitudinal slot (3). Johnson further teaches the advantage of such a configuration provides a mechanism to vary the singeing effect (column 1, lines 20-21), thereby increasing the versatility of the device. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Peterson with the variable position adjuster mechanism of Johnson in order to provides a mechanism to vary the singeing effect, thereby increasing the versatility of the device.

18. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson (U.S. Patent No. 2,231,219) in view of Hashimoto. (U.S. Patent No. 5,064,993).

Peterson discloses all of the limitations of the claimed invention, as previously set forth, except for specifically calling for the head also including at least two mounting pins electrically connected to the heat generating elongate element and the hair cutting apparatus including matching mounting sockets, electrically connected to the source.

However, at least two mounting pins being electrically connected to the elongated element with the main apparatus including matching mounting sockets electrically connected to the source is known in the art. Hashimoto, for example, teaches a hair cutting apparatus comprising an electrical heating element (3) on at least two supporting pins (two terminals 32, 33) which extend to projecting terminals (34, 35) (column 3, lines 52-58). In addition, Hashimoto teaches a complementary mounting structure (corresponding first and second receptacles 51, 52; column 4, lines 17-34; see Figures 3A-3C, 4, 5, 6). Hashimoto further teaches the advantage of such a configuration provides a support which tautly holds the heating wire to be slidably and removably positioned within the apparatus, thereby allowing easy removal of the support in order to access the wire if such should break or need repair. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Peterson with the support and mounting pins head with corresponding apparatus receptacles in order to provide a support which tautly holds the heating wire to be

slidably and removably positioned within the apparatus, thereby allowing easy removal of the support in order to access the wire if such should break or need repair.

19. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson (U.S. Patent No. 2,231,219) in view of Parker et al. (U.S. Patent No. 6,481,104).

Peterson discloses all of the limitations of the claimed invention, as previously set forth, except for a housing and also including means for vibrating the elongate element in a direction perpendicular to a long dimension thereof; and the means for vibrating being operative to vibrate the head with a motion causing said vibration of the elongate element.

However, a vibrating shaving system including a means to vibrate a shaving head in a direction perpendicular to the long dimension of the housing and the means for vibrating the head and causing the shaving head to vibrate is known in the art. Parker, et al., for example, teach vibrating shaving systems comprising a small DC motor (100) being secured within the housing (10) to channel (80) and the motor shaft (110) being secured to eccentric or off-center weight (120) to create a mechanical vibratory excursion ( $\Delta$ ) (Abstract; column 1, lines 40-47; column 3, lines 16-29; column 4, lines 3-6). Parker et al. further teach that such a configuration provides a reduction of friction between the cutting element and the user's skin, thereby providing a more comfortable shaving session experience (column 2, lines 1-5, 27-28; column 4, lines 10-16). It would have been obvious to one of ordinary skill in the art at the time of the

invention was made to modify Peterson with the means for vibrating of Parker et al. in order to provide a reduction of friction between the cutting element and the user's skin, thereby providing a more comfortable shaving session experience.

20. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson (U.S. Patent No. 2,231,219) in view of Johnson (U.S. Patent No. 3,093,724) as applied to claims 4, 5 and 7 above, and further in view of Tse et al. (U.S. Patent No. 6,452,501) and Shibuya (U.S. Patent No. JP 11156800 A).

Peterson in view of Johnson discloses all of the limitations of the claimed invention, as previously set forth, except for a motion detector adapted to detect motion of said heat-generating elongate element in relation to the skin.

However, a motion detector in a hand held electrical heating appliance to disable a heat generating means, as described by Tse et al., is known in the art. Tse et al. teach an automatic shut-off (ASO) and indication device utilizing a motion sensor, hand sensor or touch sensor as being particularly useful in electric pressing irons, but implementation in other electric heating appliances, such as hair dryers and other hand-held or stationary heating appliances being possible as well (column 2, lines 1-3, 31-36; column 3, lines 38-41). Tse et al. further teach the motion/orientation sensor (116; see Figure 4, 7) connected to a microcontroller (122) that disables the power to the heater (12) (column 3, line 39 – column 4, line 67) to prevent hazardous situations when the heating appliance is left unattended (column 1, lines 28-31), thereby increasing the operational safety of the device. In view of Tse et al., it would have been obvious to one



of ordinary skill in the art at the time of the invention to place a motion detector and controller in the operational handle of the shaving device to detect motion and prevent hazardous situations when the heating appliance is left unattended, thereby increasing the operational safety of the device.

Peterson in view of Johnson and Tse et al. further discloses all of the limitations of the claimed invention, as previously set forth, except for one or more adjuster mechanisms adjusting the position of the heat generating elongate element responsive to detection by said motion detector.

However, adjusting the length of a heating wire during operation is known in the art. Shibuya, for example teaches a heating wire (16, 16A, 16B) having the length adjusted by moving one or more adjuster mechanisms (auxiliary electrodes 13). Shibuya further teaches the advantage of such a configuration provides automatic adjustment for the change in velocity of the cutting apparatus, thereby increasing the operational efficiency of the heating wire cutting apparatus. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Peterson in view of Johnson and Tse to provide the additional regulation the length adjusted by moving one or more adjuster mechanisms in order to provide automatic adjustment for the change in velocity of the cutting apparatus, thereby increasing the operational efficiency of the heating wire cutting apparatus.

21. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson (U.S. Patent No. 2,231,219) in view of Johnson (U.S. Patent No. 3,093,724)

as applied to claims 4, 5 and 7 above, and further in view of Shalev et al. (International Publication No. WO 03/009976 A1).

Peterson in view of Johnson discloses all of the limitations of the claimed invention, as previously set forth, except for a motion detector adapted to detect motion of said heat-generating elongate element in relation to the skin; and the one or more adjuster mechanisms adjusting the position of the heat generating elongate element responsive to detection by said motion detector.

However, a motion detector in a hand held electrical heating appliance to disable a heat generating means and control the width of a heating element is known in the art. Shalev, for example, teach a velocity detector (1070) or a mechanical velocity detector (1062) that is used to determine velocity. Shalev et al. further teach the advantage of such a configuration provides the ability to detect variations in velocity, thereby varying temperature, pulsation rate and/or width in heating elements (page 17, line 26 – page 19, line 4). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Peterson in view of Johnson with the motion velocity detector (1070, 1062) in order to provide the ability to detect variations in velocity, thereby varying temperature, pulsation rate and/or width in heating elements.

22. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (U.S. Patent No. 3,093,724) in view of Tse et al. (U.S. Patent No. 6,452,501) and Shibuya (U.S. Patent No. JP 11156800 A).

Johnson discloses all of the limitations of the claimed invention, as previously set forth, except for a motion detector adapted to detect motion of said heat-generating elongate element in relation to the skin.

However, a motion detector in a hand held electrical heating appliance to disable a heat generating means, as described by Tse et al., is known in the art. Tse et al. teach an automatic shut-off (ASO) and indication device utilizing a motion sensor, hand sensor or touch sensor as being particularly useful in electric pressing irons, but implementation in other electric heating appliances, such as hair dryers and other hand-held or stationary heating appliances being possible as well (column 2, lines 1-3, 31-36; column 3, lines 38-41). Tse et al. further teach the motion/orientation sensor (116; see Figure 4, 7) connected to a microcontroller (122) that disables the power to the heater (12) (column 3, line 39 – column 4, line 67) to prevent hazardous situations when the heating appliance is left unattended (column 1, lines 28-31), thereby increasing the operational safety of the device. In view of Tse et al., it would have been obvious to one of ordinary skill in the art at the time of the invention to place a motion detector and controller in the operational handle of the shaving device to detect motion and prevent hazardous situations when the heating appliance is left unattended, thereby increasing the operational safety of the device.

Johnson in view of Tse et al. further discloses all of the limitations of the claimed invention, as previously set forth, except for one or more adjuster mechanisms adjusting the position of the heat generating elongate element responsive to detection by said motion detector.

However, adjusting the length of a heating wire during operation is known in the art. Shibuya, for example teaches heating wire (16, 16A, 16B) having the length adjusted by moving one or more adjuster mechanisms (auxiliary electrodes 13). Shibuya further teaches the advantage of such a configuration provides automatic adjustment for the change in velocity of the cutting apparatus, thereby increasing the operational efficiency of the heating wire cutting apparatus. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Johnson in view of Tse et al. to provide the additional regulation the length adjusted by moving one or more adjuster mechanisms in order to provide automatic adjustment for the change in velocity of the cutting apparatus, thereby increasing the operational efficiency of the heating wire cutting apparatus.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (U.S. Patent No. 3,093,724) in view of Shalev et al. (International Publication No. WO 03/009976 A1).

Johnson discloses all of the limitations of the claimed invention, as previously set forth, except for a motion detector adapted to detect motion of said heat-generating elongate element in relation to the skin; and the one or more adjuster mechanisms adjusting the position of the heat generating elongate element responsive to detection by said motion detector.

However, a motion detector in a hand held electrical heating appliance to disable a heat generating means and control the width of a heating element is known in the art.

Shalev, for example, teach a velocity detector (1070) or a mechanical velocity detector (1062) that is used to determine velocity. Shalev et al. further teach the advantage of such a configuration provides the ability to detect variations in velocity, thereby varying temperature, pulsation rate and/or width in heating elements (page 17, line 26 – page 19, line 4). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Johnson with the motion velocity detector (1070, 1062) in order to provide the ability to detect variations in velocity, thereby varying temperature, pulsation rate and/or width in heating elements.

### ***Remarks***

23. With respect to applicant's reply/argument that Peterson teaches against a device having the possibility of the heat generating elongate element touching the skin, the argument is deemed moot. The recitation to the recitation to "such that, in operation, the heat generating elongate element can touch the skin" is deemed intended use. It has been held that a recitation with respect to the manner in which the claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations (see MPEP § 2114). Peterson explicitly discloses the heat generating elongate element (heated wire 3) situated in the opening (slot 5) to provide a close shave. Therefore since Peterson discloses the structural limitations of the recited claims, Peterson fully meets "a heat generating elongate element situated in the opening, positioned with respect to the opening such that, in operation, the heat generating elongate element can touch the

skin, and capable of producing heat sufficient to cut hair, when electrified" given its broadest reasonable interpretation.

24. With respect to applicant's reply/argument that the Peterson does not teach each of the skin depressing elements have a long axis pointed generally toward the center of the opening, the examiner respectfully disagrees. Peterson explicitly discloses tubular member (1) having a slot (5) therein (see Figures 1-3). The tubular member (1) has ends defining a pair of skin depressing elements. The skin depressing elements (ends defined by slot 5 in tubular member 1) have a long axis (the axis along the length of tubular member 1) and the skin depressing elements (ends defined by slot 5 in tubular member 1) are pointed generally toward the center of the opening (slot 5). Therefore, Peterson fully meets "wherein each of the skin depressing elements has a long axis pointed generally toward the center of the opening" given its broadest reasonable interpretation.

25. With respect to applicant's reply/argument that Johnson teaches against a device having the possibility of the heat generating elongate element touching the skin, the argument is deemed moot. The recitation to the recitation to "such that, in operation, the heat generating elongate element can touch the skin" is deemed intended use. It has been held that a recitation with respect to the manner in which the claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations (see MPEP § 2114). Johnson explicitly discloses the heat generating elongate element (heated longitudinal wire blade 4) situated in the opening (longitudinal slot 3) to cut hair at a desired length. Therefore

since Johnson discloses the structural limitations of the recited claims, Peterson fully meets "a heat generating elongate element situated in the opening, positioned with respect to the opening such that, in operation, the heat generating elongate element can touch the skin, and capable of producing heat sufficient to cut hair, when electrified" given its broadest reasonable interpretation.

26. With respect to applicant's reply/argument that the Peterson does not teach each of the skin depressing elements have a long axis pointed generally toward the center of the opening, the examiner respectfully disagrees. Johnson discloses tapered teeth elements (1, 2) having a pair of skin depressing elements (very end portions of discloses tapered teeth elements 1, 2; see Figures 1, 3, 4). The skin depressing elements (very end portions of discloses tapered teeth elements 1, 2; see Figures 1, 3, 4) have a long axis (the axis along the length of the device) and the skin depressing elements (very end portions of discloses tapered teeth elements 1, 2) are angled/pointed generally toward the center of the opening (longitudinal slot 3). Therefore, Johnson fully meets "wherein each of the skin depressing elements has a long axis pointed generally toward the center of the opening" given its broadest reasonable interpretation.

### ***Conclusion***

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHEN J. RALIS whose telephone number is (571)272-6227. The examiner can normally be reached on Monday - Friday, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic



Art Unit: 3742

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen J Ralis/  
Primary Examiner, Art Unit 3742

/TU B HOANG/  
Supervisory Patent Examiner, Art Unit 3742

Stephen J Ralis  
Primary Examiner  
Art Unit 3742

SJR  
August 13, 2008